



### Tree Country

Best of Tree Country is published quarterly by the South Carolina Forestry Commission in the winter, spring, summer and fall.

The Commission is solely responsible for the content of this newsletter, but welcomes appropriate submissions from allied organizations, industry partners, consultant foresters, elected officials, landowners and private citizens.

Please contact SCFC Director of
Communications Doug Wood at (803)
896-8820 or dwood@scfc.gov to submit
information, articles and/or photographs.
The Forestry Commission reserves the right to
edit or exclude submissions based on its own
editorial criteria.

South Carolina Forestry Commission 5500 Broad River Road, Columbia SC 29212 (803) 896-8800 | www.scfc.gov

### INSIDE THIS ISSUE



#### **Success Stories**

SCFC held a dedication ceremony at C.E. Berry, Jr. Forestry Center at Windy Hill; Natural resource agencies sign shared stewardship agreement.



#### Forestry's Economic Impact Update

South Carolina Forestry Commission officials announced the economic impact of the state's forestry sector has increased to \$23.2 billion.



### FY 2023-24 Budget Requests

The SCFC released a prioritized summary of its FY2023-24 budget requests.



### **Wood Magic Returns**

After a two-year hiatus due to Covid-19, the Wood Magic Forest Fair resumed its normal schedule of three events around the state.



The cover photo features a creek at the Berry Forestry Center.



#### **Prevention Month a Success**

October was a very successful month for the SCFC WUI Team. Agency staff attended community events and spread wildfire prevention messaging.



### C.E. Berry. Jr. Forestry Center Dedication

The South Carolina Forestry
Commission held a dedication
ceremony Oct. 13 for its newest
landholding, the C.E. Berry, Jr.
Forestry Center at Windy Hill, in
Saluda County. The agency was
pleased to host nearly 100 friends of
the late Gene Berry, who owned the
500 acres of land that he donated to
the Commission and for whom the
property is now named.

Also joining in the festivities were local dignitaries, including SC Representative Cal Forrest (District 39), Ridge Spring Mayor Qwendolyn Etheredge, Berry's "brothers" in the Windy Hill Rod & Gun Club, members of the Upper Savannah Land Trust, SCFC Commissioner Eric Smith and local staff of the Forestry Commission.

Many thanks to Judge David Sawyer, Jr., without whose planning and



Attendees listen to Judge David Sawyer talk about the property.



Judge David Sawyer, personal representative and successor trustee of the Berry Estate, welcomed everyone, introduced guests and gave some history of the property.



The office will be home to the Edgefield/ McCormick/Saluda Sector personnel.

assistance the event could not have been held, and to local restaurant Juniper, which catered a fine Southern lunch for all assembled.

This property will be the new home of the Edgefield/McCormick/
Saluda office and will be managed by Harbison State Forest Manager Trip Miller. This property will be managed similar to our other state forests; for sustainable timber production, wildlife habitat and other ecosystem benefits. Just like with our other state forests we will return 25% of all timber revenue to the local school district.

#### Natural Resource Agencies Sign Shared Stewardship Agreement

Directors of nine federal and state agencies came together Dec. 9 to sign a Shared Stewardship agreement at a ceremony held on Harbison State Forest. Shared stewardship agreements between federal and state agencies establish a framework to improve collaboration, accomplish mutual goals, further common interests and effectively respond to the increasing ecological challenges and natural resource concerns. This was the largest group of agency partners (nine) ever to convene to sign a shared stewardship memorandum of understanding within a state.

The agreement will use the best available science to manage and enhance private and public lands within the Palmetto State. South Carolina's forests will benefit from strengthened partnerships between these agencies.

"This memorandum of understanding reminds us of our shared responsibilities to care for South Carolina's lands across all boundaries," said Southern Regional Forester Ken Arney with the USDA Forest Service. "This shared stewardship agreement builds on a long history of collaboration between the USDA and the state of South Carolina in improving air and water quality and ensuring our forestlands are sustainable for future generations."

"The diversity of the signatories here today shows that conservation truly is a team sport here in South Carolina. We have a great group of partners engaged in conserving the forests of our state and the full suite of benefits they produce," said State Forester Scott Phillips. "Our forests provide clean air, clean water, wildlife habitat, recreational opportunities and beautiful scenery. At the same time they provide sustainable raw materials that are a pillar of our state's economy, supporting more than 100,000 high paying jobs and generating an annual economic impact of \$23.2 billion. Signatories included:

- Ken Arney, Southern Regional Forester, USDA Forest Service
- Scott Phillips, State Forester, SC Forestry Commission
- Robert Boyles, Director, SC Department of Natural Resources
- Paul McCormack, State Parks
   Director, SC Department of Parks,
   Recreation & Tourism
- Ann English, State Conservationist, Natural Resources Conservation Service
- Laurie Funderburk, State
   Executive Director, USDA Farm
   Service Agency
- Leo Miranda, Southeast Regional Director, US Fish & Wildlife Service
- George Askew, VP, Public Service & Agriculture
- Major General R. Van McCarty, The Adjutant General, SC National Guard



Directors of federal and state agencies sign the Shared Stewardship agreement.

### Forestry's Economic Impact Increases to \$23.2 Billion

South Carolina Forestry Commission officials announced the economic impact of the state's forestry sector Nov. 3, citing a recently commissioned Economic Impact Analysis for Planning (IMPLAN) study.

In detailing the \$23.2 billion impact that the allied sectors of forestry and forest products-related industries generate on the Palmetto State's economy, the Forestry Commission study also revealed that forestry generates more than 100,000 jobs and \$5.5 billion in labor income.

The results of the economic impact analysis of 2020 data were presented by study lead Dr. Joey Von Nessen, a research economist with the University of South Carolina Darla Moore School of Business, at the Forestry Association of South Carolina's 2022 annual meeting. The total economic output of forestry grew 9.6% since the last report published in 2019. The other factors analyzed – employment, labor income and value-added metrics – increased by 1.9%, 12.5%, and

8.0%, respectively.

"Forestry is a critical industry to our state. Among the manufacturing industries, **forestry is ranked #1 in employment, #2 in labor income and value-added, and #3 in economic output,**" said State Forester Scott Phillips. "While our forests make significant contributions to the economy of our state, they also produce clean air, clean water, wildlife habitat, beautiful scenery and recreational opportunities that attract people to South Carolina, making our forests an integral part of the fabric of life here."

According to Dr. Von Nessen, the growth in the industry was largely a factor of an increase in demand for forest products, such as construction materials and sanitary paper products, and the resulting rise in commodity prices.

"As much as forestry grew in 2020, I anticipate the economic impact to be even higher when we study 2021 data," said Dr. Tim Adams, Resource Development Division Director with the Forestry Commission. "Population growth and the resulting demand for forestry products reached record levels in that year, so we're already excited about the follow-up report next year."

The full economic impact study is available on the SCFC website at: <a href="https://www.scfc.gov/wp-content/uploads/2022/11/Release-EconomicImpactOfSCForestry23Billion.pdf">https://www.scfc.gov/wp-content/uploads/2022/11/Release-EconomicImpactOfSCForestry23Billion.pdf</a>.

#### **South Carolina's Forests Generate:**

- \$23.2 billion impact to the state's economy
- More than 100,000 jobs
- \$5.5 billion in labor income



Green wood sits at Georgia Pacific's saw and plywood mill in Prosperity. Forest products generate \$23.2 billion to South Carolina's economy.



A big forklift carries logs to the mill at Georgia Pacific in Prosperity. Forestry generates more than 100,000 jobs in South Carolina.



Forests are among South Carolina's most valuable

# SCFC BUDGET REQUEST

### FY2023-24, PRIORITIZED SUMMARY

#### **Priority 1: Recruitment and retention**

Competition for workers, particularly in forestry, is at an all-time high. Entry-level salaries for wildland firefighters, law enforcement officers and foresters are not competitive with the increases for comparable positions within private industry or state and federal government.

These non-competitive wages are hampering recruitment efforts, leading to long times to fill positions and low numbers of qualified applicant for forestry positions. Compensation inequities between SCFC Class I law enforcement officers and other state law enforcement officers must be addressed.

- The number of qualified candidates for open forestry positions in the agency has fallen nearly 60% from 9.5 applicants/posting in FY2021 to 3.92 applicants/posting in FY2022.
- To fill current and expected vacancies, the agency will need to hire at least 15 forester positions in FY2023.
- The entry-level salary for SCFC Class I officers is 23% below the minimum starting salary recommended by DSHR for Class I officers.

• Currently ~9% of the agency's frontline firefighter positions are vacant, with the average position being vacant nearly 10 months.

Additionally, the high number of employees eligible to retire within the next five years (>40%) exacerbates the situation; 24% of SCFC's workforce can retire today.

Fully funding this request will provide salary increases for critical positions. It will also shift four FTEs to more stable state funding and provide three new FTEs to bolster recruitment, safety and training efforts.



#### Requested amount:

• General recurring: \$3,415,000

#### FTEs:

- +7 (state)
- -3 (federal)
- -1 (other)

3 (total)

Supporting this budget request item is a recent Division of State Human Resources salary study that recommends increasing the salary ranges of SCFC Fire Management Officers, Investigators and Foresters.

South Carolina
Forestry Commission
Compensation Study

According to DSHR's analysis, the current minimum salaries for the aforementioned positions are substantially lower than those of their counterparts in Georgia,

North Carolina, the US Forest Service and the private sector, making the need to update these career paths critically important for agency succession planning.

DSHR believes the proposed increases will assist SCFC in the recruitment and retention of these important positions and prepare the agency for the looming impacts of retirements.





### Priority 2: Increasing costs for emergency response operations

Inflation has dramatically increased the cost of fuel, supplies, maintenance and repairs for agency firefighting equipment. The Commission operates over \$75 million of wildland firefighting equipment, which requires funds to maintain and provide fuel for. To ensure that resources can respond to wildfires, additional operating funds are critically needed to sustain the agency's fleet for the continued protection of forests, homes and lives of SC citizens.

#### Requested amount:

- General recurring: \$655,000
- Federal authority: \$1,400,000





### Priority 3: Increasing costs for firefighting equipment

Inflation and supply chain issues have increased the cost of firefighting equipment substantially. The cost of a firefighting unit, for example, has increased more than 25% over the past year.

Looking ahead, the cost of a firefighting unit is expected to go up an additional 5% in FY2024. Because of those looming increases, our existing funding of \$2 million state recurring and \$2.2 million from Act 273 is simply not sufficient to achieve our previously attained goal of 160 enclosed-cab bulldozers by 2025.

#### Requested amount:

General non-recurring: \$1,600,000



### **Priority 4: Contract single-engine air tankers (SEATs)**

The addition of contract Single-Engine Air Tankers (SEATS) during the peak of wildfire activity would provide aerial firefighting capacity and result in a significant improvement in the effectiveness of wildfire suppression, the protection of homes and improved properties, and increased safety for firefighters, first responders and the public. Moreover, wildfire complexity has increased substantially as the state's population continues to grow and citizens build houses in our forests, expanding the wildland-urban interface (WUI).

### Requested amount:

General non-recurring: \$3.500.000

### **Priority 5: Law enforcement vehicle**

This request is a companion to the recruitment and retention budget request. Should the law enforcement investigator position be funded, onetime funding will be needed to supply the tools necessary to do the job, including purchasing a vehicle for this officer.

#### Requested amount:

· General non-recurring: \$62,700

# Wood Magic Resumes After Two-Year Hiatus



After a two-year hiatus due to Covid-19, the Wood Magic Forest Fair resumed its normal schedule of three events around the state.

Approximately 515 fifth-grade students attended the 4-hour program October 4-7 at the T. Ed Garrison Arena in Clemson. Harbison State Forest hosted the event Oct. 24-28 with 680 students attending in Columbia. The Sewee Environmental Center in Awendaw hosted the last fair of the year, with 523 students attending Nov. 15-18.

Thank you very much to the volunteers who helped at the three programs. Without their support, the program would not be possible! Registration for the 2023 Wood Magic will open next spring. We are looking forward to another great year of Wood Magic!



Brad Bramlett explains how burning can help the habitat of the red-cockaded woodpecker.



Learning about the gifts the forest gives us is always enlightening.

### St. Matthews Elementary Students Learn About Our Forests

Fourth-grade students at St. Matthews Elementary School learned about tree growth, tree physiology and became trees in a forest competing for survival at an education program December 8. Environmental Education Coordinator Matt Schnabel and Calhoun Soil & Water Conservation District Manager Mary Dixon partnered in this outreach effort to teach students about our forests.



Mary led the first learning station and used tree cookies (cut cross-sections of tree stumps) to teach about the connection between a tree's annual growth rings and environmental conditions that affect a tree's growth. Using a paper plate and marker, students created tree cookies the same age as themselves. Students identified when important events in their lives took place, such as when they were born, when they started school, and so



Environmental Education Coordinator Matt Schnabel answers questions from the students at St. Matthews Elementary.

on.

Matt led the second learning station where students learned how limiting factors can affect a forest by becoming part of a forest in a hands-on (and body-on) game. Students learned how trees are affected by competition for resources and by natural or human-caused events. They collected, organized and analyzed their data to draw conclusions on how to best manage a forest for optimal health and production.



Matt demonstrates how factors affect a forest with a game for the students.

### Start Planning for Wildfire Community Preparedness Day

It's not too early to start working with communities in planning a Community Wildfire Preparedness Day

Community Event. Wildfire Community Preparedness Day is a national campaign that encourages people and organizations everywhere to come together on a single day to take action to raise awareness and reduce wildfire risks. In the US and Canada Community Wildfire Preparedness Day is always held on the first Saturday in May.



### Plan your project

This year Preparedness Day is focused on what residents can do on and around their home to help protect against the threat of wildfires. The Prep Day toolkit provides a list

of project ideas, safety tips, and more, to help guide you towards event day.



#### Download the toolkit

Please don't hesitate to reach out for planning and implementation assistance from the WUI Team. While we can't make each and every event, we can help provide you with planning assistance for a successful event.

## Wildfire Prevention Month A Success

The month of October was a very successful month for our WUI Team. All over the state our agency staff were able to attend community events and spread our wildfire prevention messaging. A special thanks for all our folks who participated in these events across the state.

Community events are very special for our residents, and it is one of the best ways to promote wildfire prevention. Over the last couple of years these types of events have dropped due to COVID-19. This year we came back strong and were able to participate in 13 community events during October. At these events we estimated 4,500 people in attendance.

Upstate events like the Easley Fire Expo and Piedmont Park Fire Prevention Day turned out a lot of residents. Greenville/Pickens Sector FMO Ray Cassell and Upstate WUI Coordinator Chris Revels were able to attend these and other events and had help from others in our agency. Down in the Coastal area Coastal WUI Coordinator Andy Johnson was able to work with several sector FMOs and forestry technicians at events like the Redcliff Elementary School and the New Ellington Community Fair. In the Pee Dee I was able to work with some sector FMOs to coordinate events like the Fire Prevention Parade in Johnsonville and the open house at the Murrells Inlet/Garden City Fire

#### PREVENTION

-Drake Carroll

Department.

It is very important for our folks to attend these events when they can. Not only do we meet with the public,



Get Ready Greenville attendees check out the SCFC exhibit.



Georgetown Sector Forestry Technician I Tracey Scalzott, Horry/Marion Project Forester Caleb Watson and Georgetown Sector FMO Jon Thomas hand out information and goodies to attendees.

but many of these events also get us involved and connected with the local fire departments. Our groups working together with a united message makes a huge difference in our overall success when it comes to preventing wildfires.

Another successful part of our messaging this year was our Cancel Wildfires SC campaign. The commercials created have gotten great feedback, and I feel that it was a huge success. I hope that all of you have had the opportunity to see them on TV or hear them on the radio. The Communications & Public

Information staff did a great job with getting this put together as well as the effort to get both Coach Swinney and Coach Beamer onboard. Getting our prevention message out to that many people will make a difference in the long run for our wildfire prevention efforts.

The radio version of the PSAs was played 4,004 times on more than 100 stations across the state in October alone. The TV PSAs aired on 22 stations a whopping 6,271 times!

So, on behalf of the WUI team, I would like to say THANK YOU.

### Insurance Institute for Business & Home Safety

The Insurance Institute for Business & Home Safety (IBHS) near Richburg held an open house for WUI and prevention partners from GA, NC and SC Jan. 12. Piedmont Firewise and Prevention Coordinator Chris Revels, Piedmont Assistant Regional Forester Brad Bramlett and Coastal Firewise and Prevention Coordinator Andy Johnson attended the event. The IBHS campus comprises around 90 acres of research stations and facilities.

IBHS does independent studies on construction materials ranging from shingles to mulch used to build homes or used around homes. Topics discussed at this event included home spacing, desk construction, green roofs/ Solar PV (Photovoltaic - which is the conversation of light to

#### PREVENTION

-Andy Johnson

electricity) and expanding vents.
On Jan. 12, no homes were being "burned," but attendees got to see the building in which actual homes are constructed and setup for actual ignitions. This building hosts human-sized fans that can generate hurricane force winds and a deluge system that can simulate heavy rains. The "home" is placed on a turn table that's built into the floor so it can be rotated to any direction the test calls for.

IBHS only studies materials that can be purchased off the shelf at your local home center. One of the items discussed were Intumescent Vents. These vents can be found in two types. The first type is painted with a coating that swells, causing



The outside of the test warehouse with the intake side of the fan system.



Attendees listen to an orientation on IBHS.

the openings to be closed and not allow the entry of embers or fire. The second type has specially engineered metal mesh that will swell causing the same effect.

Hail is a heavily studied topic at IBHS. Researchers will pre-stage in areas that are forecasted with storms. They wait on the hail to start and collect it, then measure its size, weight, and density in an effort to make materials more resilient to hail damage.

You can find more information about IBHS at <a href="https://ibhs.org">https://ibhs.org</a>.



Piedmont Firewise and Prevention Coordinator Chris Revels holds a 3D-printed piece of the largest recorded hailstone.



The Yap Ye' Iswa (Day of the Catawba) Festival opening ceremony.

### YAP YE' ISWA (Day of the Catawba) Festival

Upstate WUI Coordinator Chris Revels attended the YAP YE' ISWA (Day of the Catawba) Festival at the Catawba Indian Reservation in Rock Hill Nov. 19. The Catawba Nation is one of the upstate's Firewise communities.

The Catawba Indians used to inhabit the territory around the Catawba River in North and South Carolina. In the 17th century the Catawba, which means "people of the river," numbered about 5,000 but by the end of the 20th century there were only about 1,200 descendants of the Catawba, who lived around Rock Hill. The last known speaker of the Catawba language, Red Thunder Cloud, a singer and storyteller, died in January 1996.



The heritage of the Catawba is celebrated by the Catawba Cultural Preservation

Project, which holds the festival every year near the Thanksgiving Holiday. The Yap Ye' Iswa Festival is a way for the Catawba to celebrate their culture and share it with people of all backgrounds.

The festival begins with a calling song performed by the River Spirit drum group with the Grand Entry of tribal veterans, dancers and drummers. After the Grand Entry, various tribal drum groups play while tribal dancers perform traditional Catawba dances. Besides local residents from the reservation, people from both Carolinas Georgia, and several other states were in attendance.

Several tribe members shared many cultural crafts and cooking demonstrations as well as other activities. The SC Forestry Commission and the USDA – Farm Service Agency



A young firefighter is ready to prevent wildfires.



A Forestry Commission information table with giveaways is set up for visitors.

and the Natural Resource Conservation Service (NRCS) were also in attendance.

The WUI team is working closely to promote the Firewise Program and to help reinstitute prescribed fire on Catawba lands.

A big shout out to Cherokee/Chester/York Project Forester Gretchen Spaulding for taking time out of her Saturday morning to help get the information tent set up.



(left to right) Ron Holt goes over the hand signals with Lance Cumbie and Wayne Smith before videoing begins.

### Black River Personnel Work on Training Videos

Black River personnel worked on two training videos Oct. 21 behind the Kingstree shop. Black River Unit Forester Ron Holt directed Georgetown Sector Forestry Technician I Wayne Smith and Williamsburg Sector Forestry Technician I Lance Cumbie in turning over a pull plow and uprighting it properly and how to escape from your dozer when it is turned over and you can't use the doors. Florence/Dillon Project Forester Chet Foyle also was on hand to assist. The videos will be used in a training session in the spring. The group also assisted with getting photos of properly attaching winch cables to a tree for the Wildland Fire Academy.



Wayne Smith pulls the winch cable through the chain.

### SCFC Participates in Easley FD Open House



Greenville/Pickens Sector Forestry Technicians Matt Gilstrap, left, and Ronnie Patterson hand out Smokey Bear hats and other prevention material at the Easley event.

The Easley Fire Department held an open house Oct. 13 with a number of emergency and public service organizations present.

Upstate Wildland Urban Interface (WUI) Coordinator Chris Revels, Greenville Pickens Sector FMO Ray Cassell and Forestry Technicians Ronnie Patterson and Matt Gilstrap worked the event

talking with attendees about wildfire prevention and handing out goodies. Revels estimated there was a crowd of 1,500 to

PREVENTION

-Chris Revels

1,900 present, including the Clemson Tiger.

This event came at a critical time for the area, as it was experiencing drought conditions, so getting the word out about wildfires and proper burning techniques was crucial.



Squad 1 works to construct a firebreak on the left flank of the fire.

### Basic Fire School Held at Camp Bob Cooper

Basic Fire School was held Jan. 23-27 at Camp Bob Cooper for 16 new firefighting employees, three mechanics and one temp pilot before fire season begins. The training includes fire suppression tactics, fighting bay fires and mountain fires, wildfire origin, cause and investigation, prescribed burning, safety and accident prevention, professionalism, communications, air operations, working with cooperators and media relations. It also includes L-180 and S-130 and is mandatory for SCFC firefighters. The school was led by Protection Chief Darryl Jones and Training & Safety Manager Stephen Patterson. Classes were taught by experienced SCFC personnel from all over the state.



Basic Fire School students and instructors for the S-130 portion of school.



Piedmont Dispatch Manager Karly Cassada explains how the dispatch system works and why it is very important to check in with them.



(left to right) Berkeley/Upper Charleston Sector FMO Wade Truesdale, Beaufort/Colleton Project Forester Adam Forbes and Aiken/Barnwell Sector FMO John Wilson are led through the blindfold station by Clarendon/Sumter Project Forester Davis Martin.

### **SCFC Hosts First SC Interagency Wildland Fire Academy**

The Forestry Commission hosted a Wildland Fire Academy Oct. 17-21 at Camp Bob Cooper for Commission personnel and staff from the U.S. Forest Service, U.S. Fish & Wildlife Service, the National Park Service and The Nature Conservancy to take several "S" and "L" fire courses. The academy has been years in the making, prior to COVID, with numerous meetings, conference calls and site visits by Protection Chief Darryl Jones and Training & Safety Coordinator Stephen Patterson. The most important thing is that they were able to get a funding agreement with USFS to cover a big portion of the event.

Black River Unit Forester Ron Holt served as the Incident Commander for the short IMT that ran the event. Eight classes total were held over the course of the week including S-270, S-271, L-381, S-215, L-280, S-230 blended, S-231 blended and S-236.

### Bailey Leads L-280 Leadership Training

Coastal Regional Forester Calvin Bailey was the lead instructor for the L-280 class at the inaugural South Carolina Interagency Wildland Fire Academy. Calvin led the classroom portion of



(left to right) Statewide Dispatch Coordinator Kelly Banks leads Chesterfield/Lancaster Sector FMO Glen Lampley,Dorchester Orangeburg Sector FMO Thad Wimberly, Colleton/Lower Charleston Sector FMO Ron Clark and Allendale/Hampton/Jasper Project Forester Drew Pressley in the 4X4 station.

the class while Pee Dee Regional
Forester Mike Ney led the blindfold
station, Piedmont Regional Forester
Pete Stuckey led the Search & Rescue
station, Pee Dee Assistant Regional
Forester James Brunson led the Fire
Shelter station, Coastal Assistant
Regional Forester Kip Terry led the
hose lay station and USFS's Kurt
Kause led the 4X4 station. Each station
had a different leader from their group
to lead them through the exercise,



Coastal Regional Forester Calvin Bailey divides the class into groups.

which was followed by an After Action Review (AAR) and critique.



Horry/Marion Sector Forestry Technician Steve Jordan uses his dozer to push the sand back to the dunes in Garden City.

### Commission Assists Georgetown County After Hurricane Ian

The deadly Hurricane Ian made its third landfall Sept. 30 near Georgetown as a Category 1 storm with winds at 85 mph. This powerful storm, estimated to be one of the costliest hurricanes ever to hit the U.S., pummeled western Cuba and pounded Florida as a Category 4 storm causing massive destruction. Ian was downgraded to a tropical storm Sept. 29, but gathered strength in the warm waters of the Atlantic Ocean to curve back and strike South Carolina. Ian headed north quickly. By Oct. 1, it was a tropical depression centered in Virginia with rain bands stretching to Boston.

Gusts of 92 mph were recorded in Charleston Harbor. Myrtle Beach recorded a 6.4-foot tidal surge, and Charleston received 10.75 inches of rain. Ian packed winds near 60 mph hundreds of miles inland, knocking out power to 240,000 statewide with downed trees blocking roads. Most of eastern South Carolina received 3 to 8 inches of rain. The ferocious storm damaged the South Carolina coast, ripping apart or damaging five piers,



Storm surge flooded Garden City from the beach to the marsh at Murrells Inlet.

flooding streets and dumping tons of beach sand on roadways along the coast.

Beaches along South Carolina's northern coast bore the brunt of damage. Pawley's Island, Garden City and Cherry Grove were covered by several feet of sand and mud after the water subsided. Ian flooded homes and blew roofs off buildings, but it spared South Carolina the death and large-scale destruction it brought to Florida. Still, the beaches here — the sand and the dunes that are the first line of defense from the sea — took a beating.

Georgetown County got an emergency permit to take the sand



Crews clear the sand covering Waccamaw Drive in Garden City.

being cleared from the roads and pile it where dunes were washed away. The Forestry Commission was requested through the EOC to help build up the dunes. Six dozers from the Black River Unit were used over a five-day period to move the sand that other resources gathered from the streets and under homes in Murrells Inlet/Garden City to rebuild the dunes. Involved in the project were Georgetown Sector Forestry Technicians Jonathan York and Brad Jones, Horry/Marion Sector Forestry Technicians Steve Jordan, Benjamin Jordan and William Caines and Williamsburg Sector Forestry Technician I Jackie Welch.

### NFC Hosts Lowcountry Landowners' Association

The SCFC Nursery & Tree Improvement (N&TI) Program partnered with Clemson University Cooperative Extension Service and the Lowcountry Landowners' Association (Beaufort, Colleton, Hampton and Jasper counties to conduct a field visit at Niederhof Forestry Center Oct. 25.

Approximately 40 people attended the tour in addition to several SCFC foresters from Hampton and

#### TREE IMPROVEMENT

-Carla Castro

Beaufort counties.

The meeting began with a catered lunch at the shop, a presentation on the general procedures of the N&TI program by Carla Castro and was followed by a three-hour tour of the property. This tour was designed to show the main activities of the tree improvement program and discuss



Participants of the tour enjoyed getting to see how tree improvement works.

the different genetics of the seedlings that are now available for purchase. Seed Orchard Manager Chris King, Coastal Assistant Regional Forester Kip Terry and Tree Improvement Specialist Carla Castro led the workshop, providing an overview of key operations at Niederhof.

The tour had five stops, which included grafting technique, management and expansion of loblolly and long-leaf pine orchards, demonstration planting, wood management and seed processing.

### Tree Giveaways Held in Horry County

#### Myrtle Beach

The City of Myrtle Beach procured 400 trees for a giveaway at Myrtle's Market Sept. 22. Thanks to the generous donations from the Arbor Day Foundation and Meritage Homes, trees filled Myrtle's Market for the community giveaway.

Pin oak, swamp oak and red maple trees were in three and five gallon containers and available on a first-come, first-served basis. The event ended early at 11:30 a.m. when all of the trees were claimed! The Arbor Day Foundation celebrates its 50th anniversary this year, as well as the 150th anniversary of Arbor Day.



Pee Dee Urban Forester Lois Edwards welcomed her neighbors to the tree giveaway. Riverside Drive neighbors got together to plant trees throughout the neighborhood.

### Conway

The City of Conway and PowerPlantSC

held a tree giveaway in Conway Nov. 5. Five hundred trees of a variety of hardwood species were given away.

### North Myrtle Beach Holds Arbor Day Program

The City of North Myrtle Beach celebrated Arbor Day Dec. 2 by planting a zelkova tree, which is a hardy tree that tolerates urban conditions. The tree was planted by the city council, the city's tree board and the garden club. The city staff, led by certified

URBAN FORESTRY

-Lois Edwards

arborist Jim Grainger, is very good at managing

their urban forest and has been a Tree City USA for 17 years. The tree board were proudly wearing their new tree board shirts. Pee Dee Urban Forester Lois Edwards spoke at the ceremony.



Members of North Myrtle Beach's city council, tree board and garden club planted a tree for Arbor Day. Pee Dee Urban Forester Lois Edwards, front row to the right of the banner, spoke at the ceremony.

### Camden Celebrates Arbor Day at Bethesda Presbyterian Church



(left to right) Rev. Brent Kendall of the Bethesda Presbyterian Church, Camden Mayor Ms. Alfred Mmae Drakeford, Camden Urban Forester Liz Gilland and the Camden Tree Board stand with the newly planted white oak after the ceremony.

The City of Camden held its annual Arbor Day Ceremony Nov. 4 at Bethesda Presbyterian Church with the dedication of the planting of a white oak tree on the church grounds on Dekalb Street. The ceremony commemorated the historic church's bicentennial.

Camden Urban Forester Liz Gilland provided the

special white oak that was planted and announced

URBAN FORESTRY

-Lois Edwards

that it would be her last Camden Arbor Day celebration with her upcoming retirement in January.

### SCFC, Williamsburg County Soil and Water Partner to Celebrate Arbor Day Celebrations

The Forestry Commission partnered with the Williamsburg County Soil and Water Board to give out



260 trees to all of the fifth grade students

in Williamsburg County to celebrate Arbor Day.

Georgetown/Williamsburg Project Forester GraceAnna
Cooper, with the assistance of other unit employees,
visited Hemingway Elementary, Williamsburg Academy,
Kenneth Gardner Elementary and C.E. Murray
Elementary during the week leading up to Arbor Day.



Georgetown Sector Forestry Technician I Brendon Williams (far left) and Georgetown/Williamsburg Project Forester GraceAnna Cooper (far right) with students from Hemingway Elementary.

### Trees SC Conference Held in Greenville

More than 100 attendees from across the state enjoyed the Annual Trees SC Conference at the Spring Hill Suites Greenville Downtown Oct. 27-28. It had been three years since the last conference took place in person due to the Covid-19 pandemic. Trees SC's new Executive Director, Sarah Morris welcomed the attendees to the conference themed "Tree Connections."

#### URBAN FORESTRY

-Cara Specht

Topics covered included the importance and the process of urban forest management plans, utility conflicts with vegetation, managing landscapes to conserve biodiversity and enhance ecosystem services, an introduction to the historic trees of Aiken, commonly found invasive urban tree pests across the state, sustainable urban landscapes, and green infrastructure. There was also a walking tour of Unity Park in addition to a presentation of the streambank restoration project that



SCFC Foresters attend the Trees SC conference held . Pictured left to right are EQIP Burning Coordinator Lowe Sharpe, Forest Management Chief Russell Hubright, Urban Forestry Coordinator Frances Waite, Pee Dee Urban Forester Lois Edwards and Coastal Urban Forester Cara Specht.

occurred during the construction of Unity Park. A half-mile of the Reedy River and adjacent wetlands had to be restored during the construction of the park.

The 2022 Golden Acorn Award was presented to Danny Burbage, a founding member of Trees SC, formerly the SC Urban & Community Forestry Council., The deodar cedar at the York County Courthouse was awarded as the 2022 Heritage Tree. Heritage Trees are recognized by their historical and/or cultural significance in the community.



Camden Urban Forester Liz Gilland presents Danny Burbage the 2022 Golden Acorn Award.

### SCAPA Conference Held in Hilton Head



Pictured left to right are Coastal Urban Forester Cara Specht, Urban Forestry Coordinator Frances Waite and Karen Firehock and Matt Lee of the Green Infrastructure Center at the SCAPA conference.

Urban Forestry Coordinator Frances Waite and Karen Firehock and Matt Lee of the Green Infrastructure Center (GIC) were invited to present at the annual SC American Planning Association (SCAPA) conference in Hilton Head Nov. 10.

More than 50 attendees were able to view the completed regional maps of wildlife corridors and habitat cores that provide healthier, more resilient, and more biodiverse forests. These corridors can be used in regional transportation plans, conservation easements, regional tourism, or water quality protection. Many of the attendees offered input on this project over the last year, but it was the first time to see all 10 maps—representing each Council of Government (COG) across the state.

### Statewide Green Infrastructure Plans Update

Over 35 attendees from 16 state agencies and other statewide groups spent December 1 reviewing the background, maps and feedback from the regional council of governments on the SC Statewide Green Infrastructure Plan. With funding from the USDA Forest Service through the SC Forestry Commission, the Green Infrastructure Center has been collaborating with local and regional entities over the past year across the 10 council of governments (COGs) on the statewide green infrastructure plan.



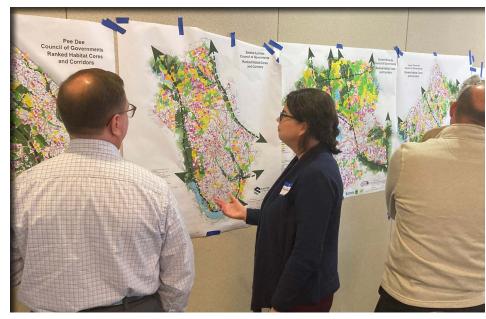
-Cara Specht

Maps and strategies were produced on regional and statewide levels to encourage a connected landscape. Connected forests are healthier, more resilient and more biodiverse. Habitat cores are intact habitats not overly bisected by roads or other breaks. They support species that require undisturbed habitats to survive and thrive. Corridors provide connections between core habitats that allow various species to move from different cores. Species decline may occur if cores are lost or spaced too far apart for species to "hop across" from core to core with an absence of a corridor. Corridors were placed with large, dotted arrows across the state. Regional councils of governments can use them as guides in future regional transportation plans, conservation easements, future parks, regional tourism and/or water quality protection projects, to name a few.

Various topics from identifying



Forest Health Coordinator David Jenkins (right) participated in the group discussion of the maps.



Urban Program Coordinator Frances Waite gives her input on one of the developed maps.

potential wildlife crossings, conservation targets, regional collaboration opportunities, riparian buffer restoration areas, solar development, and maintaining connectivity in developing landscapes were discussed. Attendees were able to view the different maps to offer feedback and input for the final production in January. Statewide maps of risks (development, sea level

rise, impaired watersheds and solar development) were also hung for all to view. Ten maps, representative of each COG, were displayed with the corridors based on habitat core ranks. Soon after the project concludes, ESRI will create online tools for map viewing and analysis that will be shared with COGS, counties, cities and other statewide groups involved with this project.



### **Military Appreciation Deer Hunt**

The National Deer Association (NDA) and the SC Forestry Commission held its annual Military Appreciation Deer Hunt Nov. 9-11 at Niederhof Forestry Center. This was the first deer hunt of the year with 10 hunters participating. Four SC National Guard military personnel participated in the hunt along with six hunters that were auction winners from NDA banquets or winners from the NDA raffle. Everyone attending enjoyed the fellowship, food and wildlife.

Every hunter saw deer and had an opportunity to harvest a deer during the hunt. Over the two mornings and afternoons 139 deer were seen on the property by the hunters. Two 8-point bucks and four big does were harvested during the rainy, windy hunt. Hurricane Nicole affected the hunt Nov. 10 and 11 with two inches of rain and winds gusting to 45 mph. The Thursday afternoon hunt had to

be shortened due to lightning in the area but the hunters still enjoyed the hunt and saw deer despite the weather.

During a break in the hunting action, State Forester Scott Phillips was joined by NDA Regional Director Rick Counts in presenting the SC National Guard Foundation with two checks for the Family Readiness Group, which assists the families of soldiers while they are deployed. Phillips presented a \$1,000 check from Shady Dale Farms owner Billy Nowlen on behalf of the Forestry Commission. Counts presented a \$1,000 check from the South Carolina NDA State Advisory Council. This money came from the auctioned price from two branch NDA banquets and a raffle held in place of the national convention. NDA branches

supported the military appreciation
hunt. The Foothills Branch, Mid
Carolina Branch and the SC NDA
Advisory Council provided meals for
the hunters, as well as The Southern
Sportsman's Alliance. The Lake
Murray Branch provided shirts and hats
for hunters, the Lowcountry

Branch provided deer

processing and the

Midlands Branch

provided corn in

preparation for

SC National Guardsman Rodney Johnson harvested a

nice 8-point

buck.

Best of Tree Country

around the state



(left to right) SCNG State Youth Director Service Member Family Care James Harris received the SCNDA check from NDA Regional Director Rick Counts. Service Member Family Care Director Lieutenant Colonel Robert Hinson received the Shady Dale Farms check from State Forester Scott Phillips.

The Forestry Commission manages the wildlife population on NFC with hunts like this. Military appreciation hunts also show appreciation to US military personnel and allow the building of relationships while practicing good game management. The hunts also increase the awareness of the Forestry Commission and its services and convey the importance of forestry to South Carolina.

#### NDA State Youth Deer Hunt

Niederhof Forestry Center hosted the State Youth Deer Hunt Dec. 2-3 for seven children from the Take One, Make One program, Outdoor Dream Foundation and the SC National Guard. The hunt was sponsored by the National Deer Association (NDA) , Southern Sportsman Alliance, Leopold, the Forestry Commission and the South Carolina Department of Natural Resources Take One, Make One program.

There was an orientation on the property, hunting program and hunt guidelines before the children were paired with a mentor. They sighted their guns in on the range and drew for stands. The hunters received a safety briefing before the afternoon hunt began.

During the hunt, three deer were harvested, and 39 deer were seen on the property. Fifteen-year-old Cooper Harrison harvested a nice 6-point buck and a 115- lb. doe while

thirteen-year-old Gabriel Hughes harvested his first deer, a 77-lb. doe. Gabriel was so excited but nervous when three does came out of the woods. He said, "I was shaking; the whole tree stand was shaking, I was so nervous."

The NDA and Southern Sportsman Alliance provided meals, mentors and some gifts for the hunters. The Take One Make One program provided guns and mentors for those who didn't have one. The Forestry Commission provided the instruction, location and transportation to and from the stands. Everyone enjoyed the fun and fellowship in the beautiful outdoors.



The hunters are ready to go to their stands.

### Coastal Employees Collect Donations for Veterans Victory House



Snacks, socks, toiletries and other necessities were collected for the residents.

During November and December the Coastal Dispatch Center and the Coastal Regional Office took up donations for the residents of the Veterans Victory House nursing facility in Walterboro. Snacks, socks, toiletries and other necessities were collected.

Dispatcher Alan Fitzsimmons delivered the items collected Dec. 17 to the staff at the Veterans Victory House, who were very appreciative. Due to COVID restrictions Alan couldn't interact with any of the residents, but they were informed that their friends at the Forestry Commission were thinking of them during the holiday season.

Good job, Coastal employees!

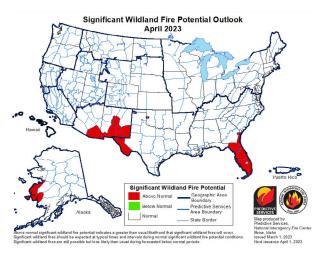


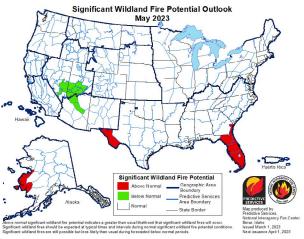
#### **SOUTHERN AREA**

Meteorological winter was very warm across the South, with many reporting stations experiencing a top five warmest winter. Anomalous warmth has only accelerated in recent weeks, and a plethora of February and wintertime high temperature records have been set in nearly every state. This has propelled our spring green-up well ahead of schedule, especially in areas that have seen above normal precipitation through the past few months and includes areas from eastern Texas and Oklahoma through much of the Mississippi Valley and Appalachians.

One major area of uncertainty in this outlook lies in the impacts from extremely cold temperatures experienced around Christmas. This abrupt cold snap in an otherwise warm winter may contribute to above normal fuel loading via dormant herbaceous fuels in areas that do not see freezes every winter, excess leaf litter from both native and invasive species, and potentially an increase in dead 10- to 100-hour fuels across the Southeast. It is possible the overlap of these very cold conditions with areas that experienced moderate to severe drought last fall could be especially prone to excess dead or damaged fuels, to include areas from the far southern Appalachians across northern and central Georgia, far southern Alabama into the Florida Panhandle, and over portions of the eastern coastal plain. Wet conditions through winter have resulted in little wildfire activity and delayed burns in these areas so far.

Multiple sources of uncertainty lead to somewhat lower than normal confidence in what to expect this spring, including the potentially rapid transition from La Niña to El Niño, along with an ongoing Sudden Stratospheric Warming (SSW) event. Major SSW events often lead to a wavier jet stream configuration several weeks after they occur, which typically enables Arctic air masses to plunge into the South. This suggests a continued wet pattern from eastern Texas and Oklahoma to the Appalachians the first week or two of March, with cooler and drier trends thereafter. Given continued wetness in early March and the record early green-up, below normal significant fire potential is forecast for March in the mainly hardwood-





-National Interagency Fire Center

dominant areas from eastern Texas and Oklahoma through Arkansas, Tennessee, Kentucky, northern Mississippi, northern Alabama, northern Georgia, and the Appalachians. The expected evolution of more wintry conditions for at least a couple of weeks adds confidence here, but there may be increasing risks towards the end of March and especially by April, especially if widespread hard freezes affect the fuelscape.

Soil moisture data continues to show lingering dryness across North Carolina, where rain in recent weeks has alleviated some concerns. Confidence here is among the lowest of any part of the geographic area, given multiple mixed signals on drought stress, precipitation, and the forecast pattern through spring. Normal significant fire potential is forecast, but this may change quickly if March does not transpire as expected.

### **CURRENT FIRE NUMBERS FOR SOUTH CAROLINA**

#### MONTH AND YEAR TO DATE COMPARISON TO PREVIOUS 5- AND 10-YEAR AVERAGE

Time Period	MARCH		JULY-MARCH		FISCAL YEAR	
	<u>Fires</u>	Acres	Fires	Acres	Fires	Acres
5 Year Average	295	2,970.6	906	6,248.5	1,368	9,017.9
10 Year Average	338	3,124.4	1,054	7,687.4	1,466	10,089.1
Current FY <sup>1</sup>	107	1,024.9	681	3,800.9	681	3,800.9

<sup>1</sup>To date for current fiscal year

